

FUJR 18.748 (100794-09745)
09/886,268

In the Drawings:

None

REMARKS

This amendment is in response to the Examiner's Office Action dated 10/4/2004. Reconsideration of this application is respectfully requested in view of the foregoing amendment and the remarks that follow.

STATUS OF CLAIMS

Claims 1-9 are pending.

Claims 1-3, 8 and 9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Bleickardt et al. (USP 5,461,622).

Claims 4 and 5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bleickardt in view of Cioffi et al. (USP 6,473,438).

Claims 6 and 7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bleickardt in view of Cioffi, and further in view of Applicants' admitted prior art.

In response, claims 1, 8 and 9 have been amended. In particular, the claims explicitly recite that the respective bit rates of the divided signals may differ from each other. Support for this amendment is located, for example, at page 26, lines 6-15 of the specification as originally filed.

REJECTIONS UNDER 35 U.S.C. § 102(b)

Claims 1-3, 8 and 9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Bleickardt et al. (USP 5,461,622). Applicant respectfully requests that the Examiner reconsider the rejection based on the present amendment and the remarks presented in the earlier response of June 17, 2004.

In particular, Bleickardt uses the existing A1 and A2 bytes in section overhead (SOH) to establish frame synchronization and the H1 and H2 bytes in an AU pointer for detecting the leading position of a low-speed (STS-1) signal. By doing so, the STS-1 signals are multiplexed into a concatenation signal (or, in the converse, a concatenation signal is split into a plurality of STS-1 signals). In other words, at the receiving end, the A1 and A2 framing bytes and the H1 and H2 pointer bytes are used for realigning data frames.

Thus, Bleickardt teaches that a high speed signal is split (or generated) by using already determined header information such as the A1 and A2 bytes and the H1 and H2 bytes. As used in Bleickardt, these bytes have already been standardized on frames formed on the basis of the multiplexing units (e.g., STS-1 or STS-3c) which have been standardized.

The present claims recite that the signal dividing means at the receiving end generates low speed divided, or concatenation signals from a high speed concatenation signal; and that the signal restoring means at the receiving end restores the original high speed concatenation signal. However, in contrast to Bleickardt, the dividing means and the restoring means perform their respective functions on the basis of guarantee information that is added to the divided signals. In particular, the guarantee adding means adds guarantee information for guaranteeing continuity. As a result, receiving end is able to determine (and reconstruct) the way in which the original concatenation signal was divided to generate the divided signals. As described, the guarantee information adding means adds guarantee information to a concatenation signal using the Z3, Z4 and Z5 bytes which the user can define at will to hold any of a variety of guarantee information in accordance with the principles of the present invention.

Furthermore, unlike Bleickardt that divides the signal into already standardized bit rates, the claims recite that a high speed concatenation signal is divided according to a bit rate available for a transmission line.

Thus, guarantee information, for guaranteeing continuity, as recited in the claims, is newly defined and the multiplexing (or dividing) of concatenation signals is controlled freely according to the characteristics of available transmission lines. This is in direct contrast to Bleickardt where the multiplexing units have already been standardized and control the dividing of VCs.

These differences allow the present invention to provided efficiency and capability not considered or taught by Bleickardt. In particular, as recited in the amended claims, the respective bit rates of the divided signals may differ from one another. Therefore, efficiency in transmission on a plurality of transmission lines via various networks increases and existing networks on which bit rates are limited can be utilized effectively. The timing extractor, buffer and stuff control section, splitter, inserters, and other circuits of Bleickardt cannot and do not provide such functionality as recited in the present claims and therefore do not identically disclose the signal dividing means of claims 1 and 8 or the signal restoring means of claim 9.

Applicants urge that Bleickardt does not identically disclose the signal dividing means and signal restoring means recited in claims 1, 8 and 9; nor does Bleickardt identically disclose that the bit rates of the divided signals may differ from one another. Accordingly, Bleickardt does not anticipate claims 1, 8 and 9 as meant under 35 U.S.C. § 102 and, therefore, reconsideration and withdrawal of the rejection of claims 1, 8 and 9 are respectfully requested. Additionally, reconsideration and withdrawal of the rejection under 35 U.S.C. § 102 of claims 2 and 3, which depend from claim 1 are respectfully requested as well.

REJECTIONS UNDER 35 U.S.C. § 103(a)

Claims 4 and 5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bleickardt in view of Cioffi et al. (USP 6,473,438).

Claims 6 and 7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bleickardt in view of Cioffi, and further in view of Applicants' admitted prior art.

The Examiner relies on Cioffi for its teaching of delay correction and combines this teaching with Bleickardt and other prior art to reject claims 4 - 7. Applicants urge that Cioffi, differs significantly from the present invention and therefore does not disclose or suggest the elements missing from Bleickardt, as described above, such as the adding of guaranteeing information, basing the bit rate of divided signals on transmission line characteristics, and supporting divided signals with different bit rates.

Dependent claims 4 - 7 include all the limitations of their parent claims and, therefore, the combination of Bleickardt and Cioffi does not disclose or suggest all the features recited in claims 4 - 7. Thus, this combination does not provide the factual basis to support a *prima facie* case of obviousness under 35 U.S.C. § 103. Reconsideration and withdrawal of the rejection of claims 4 - 7 are respectfully requested.

SUMMARY

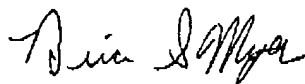
As has been detailed above, none of the references, cited or applied, provide for the specific claimed details of applicant's presently claimed invention, nor renders them obvious. It is believed that this case is in condition for allowance and reconsideration thereof and early issuance is respectfully requested.

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This amendment is being filed with a petition for extension of time for one month. The Commissioner is hereby authorized to charge the extension fee, as well as any deficiencies in the fees provided to Deposit Account No.50-1290.

If it is felt that an interview would expedite prosecution of this application, please do not hesitate to contact applicant's representative at the below number.

Respectfully submitted,



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